

Union Calendar No. 244

111TH CONGRESS
2^D SESSION

H. R. 3820

[Report No. 111–424, Part I]

To reauthorize Federal natural hazards reduction programs, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 15, 2009

Mr. WU (for himself, Mr. SMITH of Nebraska, Mr. GRAYSON, and Mr. MOORE of Kansas) introduced the following bill; which was referred to the Committee on Science and Technology, and in addition to the Committees on Natural Resources and Transportation and Infrastructure, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

FEBRUARY 26, 2010

Additional sponsors: Mr. GORDON of Tennessee and Mr. SCHIFF

FEBRUARY 26, 2010

Reported from the Committee on Science and Technology with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

FEBRUARY 26, 2010

Committees on Natural Resources and Transportation and Infrastructure discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[For text of introduced bill, see copy of bill as introduced on October 15, 2009]

A BILL

To reauthorize Federal natural hazards reduction programs,
and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 *This Act may be cited as the “Natural Hazards Risk*
5 *Reduction Act of 2009”.*

6 **SEC. 2. FINDINGS.**

7 *Congress finds the following:*

8 (1) *The United States faces significant risks*
9 *from many types of natural hazards, including earth-*
10 *quakes, hurricanes, tornadoes, wildfires, and floods.*
11 *Increasing numbers of Americans are living in areas*
12 *prone to these hazards.*

13 (2) *Earthquakes occur without warning and can*
14 *have devastating effects. According to the U.S. Geo-*
15 *logical Survey, two recent earthquakes, the Northridge*
16 *Earthquake in 1994, and the Loma Prieta Earth-*
17 *quake in 1989, killed nearly 100 people, injured*
18 *12,757, and caused \$33 billion in damages. Nearly all*
19 *States face some level of seismic risk. Twenty-six*
20 *urban areas in 14 States have a significant seismic*
21 *risk.*

22 (3) *Severe weather is the most costly natural*
23 *hazard, measured on a per year basis. According to*
24 *data from the National Weather Service over the last*
25 *10 years, tornadoes, thunderstorms, and hurricanes*

1 *have caused an average of 226 fatalities and \$16 bil-*
2 *lion of property damage per year. The 2005 hurricane*
3 *season was one of the most destructive in United*
4 *States history, killing 1,836 people, and causing \$80*
5 *billion in damage.*

6 *(4) The United States Fire Administration re-*
7 *ports that 38 percent of new home construction in*
8 *2002 was in areas adjacent to, or intermixed with,*
9 *wildlands. Fires in the wildland-urban interface are*
10 *costly. For example, the 2007 California Witch fire*
11 *alone caused \$1.3 billion in insured property losses,*
12 *according to the Insurance Services Office (ISO). In*
13 *addition, Government Accountability Office reported*
14 *in 2007 that the Federal spending for wildfire sup-*
15 *pression between 2001 and 2005 was, on average, \$2.9*
16 *billion per year.*

17 *(5) Developing better knowledge about natural*
18 *hazard phenomena and their effects is crucial to as-*
19 *sessing the risks these hazards pose to communities.*
20 *Instrumentation, monitoring, and data gathering to*
21 *characterize earthquakes and wind events are impor-*
22 *tant activities to increase this knowledge.*

23 *(6) Current building codes and standards can*
24 *mitigate the damages caused by natural hazards. The*
25 *Institute for Business and Home Safety estimated*

1 *that the \$19 billion in damage caused by Hurricane*
2 *Andrew in 1994 could have been reduced by half if*
3 *such codes and standards were in effect. Research for*
4 *the continuous improvement of building codes, stand-*
5 *ards, and design practices—and for developing meth-*
6 *ods to retrofit existing structures—is crucial to miti-*
7 *gating losses from natural hazards.*

8 *(7) Since its creation in 1977, the National*
9 *Earthquake Hazards Reduction Program (NEHRP)*
10 *has supported research to develop seismic codes,*
11 *standards, and building practices that have been*
12 *widely adopted. The NEHRP Recommended Provi-*
13 *sions for Seismic Regulations for New Buildings and*
14 *Other Structures and the Guidance for Seismic Per-*
15 *formance Assessment of Buildings are two examples.*

16 *(8) Research to understand the institutional, so-*
17 *cial, behavioral, and economic factors that influence*
18 *how households, businesses, and communities perceive*
19 *risk and prepare for natural hazards, and how well*
20 *they recover after a disaster, can increase the imple-*
21 *mentation of risk mitigation measures.*

22 *(9) A major goal of the Federal natural hazards-*
23 *related research and development effort should be to*
24 *reduce the loss of life and damage to communities and*

1 *infrastructure through increasing the adoption of haz-*
 2 *ard mitigation measures.*

3 (10) *Research, development, and technology*
 4 *transfer to secure infrastructure is vitally important.*
 5 *Infrastructure that supports electricity, transpor-*
 6 *tation, drinking water, and other services is vital im-*
 7 *mediately after a disaster, and their quick return to*
 8 *function speeds the economic recovery of a disaster-*
 9 *impacted community.*

10 ***TITLE I—EARTHQUAKES***

11 ***SEC. 101. SHORT TITLE.***

12 *This title may be cited as the “National Earthquake*
 13 *Hazards Reduction Program Reauthorization Act of 2009”.*

14 ***SEC. 102. FINDINGS.***

15 *Section 2 of the Earthquake Hazards Reduction Act*
 16 *of 1977 (42 U.S.C. 7701) is repealed.*

17 ***SEC. 103. DEFINITIONS.***

18 *Section 4 of the Earthquake Hazards Reduction Act*
 19 *of 1977 (42 U.S.C. 7703) is amended by striking para-*
 20 *graphs (8) and (9).*

21 ***SEC. 104. NATIONAL EARTHQUAKE HAZARDS REDUCTION*** 22 ***PROGRAM.***

23 *Section 5 of the Earthquake Hazards Reduction Act*
 24 *of 1977 (42 U.S.C. 7704) is amended—*

25 (1) *in subsection (a)—*

1 (A) by amending paragraph (2) to read as
2 follows:

3 “(2) *PROGRAM ACTIVITIES.*—*The activities of the*
4 *Program shall be designed to—*

5 “(A) *research and develop effective methods,*
6 *tools, and technologies to reduce the risk posed by*
7 *earthquakes to the built environment, especially*
8 *to lessen the risk to existing structures and life-*
9 *lines;*

10 “(B) *improve the understanding of earth-*
11 *quakes and their effects on households, businesses,*
12 *communities, buildings, structures, and lifelines,*
13 *through interdisciplinary and multidisciplinary*
14 *research that involves engineering, natural*
15 *sciences, and social sciences; and*

16 “(C) *facilitate the adoption of earthquake*
17 *risk reduction measures by households, busi-*
18 *nesses, communities, local, State, and Federal*
19 *governments, national standards and model*
20 *building code organizations, architects and engi-*
21 *neers, building owners, and others with a role in*
22 *planning for disasters and planning, con-*
23 *structing, retrofitting, and insuring buildings,*
24 *structures, and lifelines through—*

1 “(i) grants, contracts, cooperative
2 agreements, and technical assistance;

3 “(ii) development of standards, guide-
4 lines, voluntary consensus standards, and
5 other design guidance for earthquake haz-
6 ards risk reduction for buildings, structures,
7 and lifelines;

8 “(iii) outreach and information dis-
9 semination to communities on location-spe-
10 cific earthquake hazards and methods to re-
11 duce the risks from those hazards; and

12 “(iv) development and maintenance of
13 a repository of information, including tech-
14 nical data, on seismic risk and hazards re-
15 duction.”; and

16 (B) by striking paragraphs (3) through (5);

17 (2) by amending subsection (b) to read as fol-
18 lows:

19 “(b) *RESPONSIBILITIES OF PROGRAM AGENCIES.*—

20 “(1) *LEAD AGENCY.*—The National Institute of
21 Standards and Technology (in this section referred to
22 as the ‘Institute’) shall be responsible for planning
23 and coordinating the Program. In carrying out this
24 paragraph, the Director of the Institute shall—

1 “(A) ensure that the Program includes the
2 necessary components to promote the implemen-
3 tation of earthquake hazards risk reduction
4 measures by households, businesses, communities,
5 local, State, and Federal governments, national
6 standards and model building code organiza-
7 tions, architects and engineers, building owners,
8 and others with a role in preparing for disasters,
9 or the planning, constructing, retrofitting, and
10 insuring of buildings, structures, and lifelines;

11 “(B) support the development of perform-
12 ance-based seismic engineering tools, and work
13 with the appropriate groups to promote the com-
14 mercial application of such tools, through earth-
15 quake-related building codes, standards, and con-
16 struction practices;

17 “(C) ensure the use of social science research
18 and findings in informing research and tech-
19 nology development priorities, communicating
20 earthquake risks to the public, developing earth-
21 quake risk mitigation strategies, and preparing
22 for earthquake disasters;

23 “(D) coordinate all Federal post-earthquake
24 investigations; and

1 “(E) when warranted by research or inves-
2 tigative findings, issue recommendations for
3 changes in model codes to the relevant code devel-
4 opment organizations, and report back to Con-
5 gress on whether such recommendations were
6 adopted.

7 “(2) NATIONAL INSTITUTE OF STANDARDS AND
8 TECHNOLOGY.—In addition to the lead agency re-
9 sponsibilities described under paragraph (1), the In-
10 stitute shall be responsible for carrying out research
11 and development to improve building codes and
12 standards and practices for buildings, structures, and
13 lifelines. In carrying out this paragraph, the Director
14 of the Institute shall—

15 “(A) work, in conjunction with other appro-
16 priate Federal agencies, to support the develop-
17 ment of improved seismic standards and model
18 codes;

19 “(B) in coordination with other appro-
20 priate Federal agencies, work closely with stand-
21 ards and model code development organizations,
22 professional societies, and practicing engineers,
23 architects, and others involved in the construc-
24 tion of buildings, structures, and lifelines, to pro-
25 mote better building practices, including by—

1 “(i) developing technical resources for
2 practitioners on new knowledge and stand-
3 ards of practice; and

4 “(ii) developing methods and tools to
5 facilitate the incorporation of earthquake
6 engineering principles into design and con-
7 struction practices;

8 “(C) develop tools, technologies, methods,
9 and practitioner guidance to feasibly and cost-ef-
10 fectively retrofit existing buildings and structures
11 to increase their earthquake resiliency; and

12 “(D) work closely with national standards
13 organizations, and other interested parties, to de-
14 velop seismic safety standards and practices for
15 new and existing lifelines.

16 “(3) *FEDERAL EMERGENCY MANAGEMENT AGEN-*
17 *CY.—*

18 “(A) *IN GENERAL.—The Federal Emergency*
19 *Management Agency (in this paragraph referred*
20 *to as the ‘Agency’) shall be responsible for facili-*
21 *tating the development and adoption of stand-*
22 *ards, model building codes, and better seismic*
23 *building practices, developing tools to assess*
24 *earthquake hazards, promoting the adoption of*
25 *hazard mitigation measures, and carrying out a*

1 *program of direct assistance to States and local-*
2 *ities to mitigate earthquake risks to buildings,*
3 *structures, lifelines, and communities.*

4 *“(B) DIRECTOR’S DUTIES.—The Director of*
5 *the Agency shall—*

6 *“(i) work closely with other relevant*
7 *Federal agencies, standards and model*
8 *building code development organizations,*
9 *architects, engineers, and other profes-*
10 *sionals, to facilitate the development and*
11 *adoption of standards, model codes, and de-*
12 *sign and construction practices to increase*
13 *the earthquake resiliency of new and exist-*
14 *ing buildings, structures, and lifelines in*
15 *the—*

16 *“(I) preparation, maintenance,*
17 *and wide dissemination of design guid-*
18 *ance, model building codes and stand-*
19 *ards, and practices to increase the*
20 *earthquake resiliency of new and exist-*
21 *ing buildings, structures, and lifelines;*

22 *“(II) development of performance-*
23 *based design guidelines and methodolo-*
24 *gies supporting model codes for build-*
25 *ings, structures, and lifelines; and*

1 “(III) development of methods and
2 tools to facilitate the incorporation of
3 earthquake engineering principles into
4 design and construction practices;

5 “(ii) develop tools, technologies, and
6 methods to assist local planners, and others,
7 to model and predict the potential impact of
8 earthquake damage in seismically haz-
9 ardous areas; and

10 “(iii) support the implementation of a
11 comprehensive earthquake education and
12 public awareness program, including the
13 development of materials and their wide
14 dissemination to all appropriate audiences,
15 and support public access to locality-spe-
16 cific information that may assist the public
17 in preparing for, mitigating against, re-
18 sponding to, and recovering from earth-
19 quakes and related disasters.

20 “(C) STATE ASSISTANCE GRANT PRO-
21 GRAM.—The Director of the Agency shall operate
22 a program of grants and assistance to enable
23 States to develop mitigation, preparedness, and
24 response plans, compare inventories and conduct
25 seismic safety inspections of critical structures

1 *and lifelines, update building and zoning codes*
2 *and ordinances to enhance seismic safety, in-*
3 *crease earthquake awareness and education, and*
4 *encourage the development of multistate groups*
5 *for such purposes. In order to qualify for assist-*
6 *ance under this subparagraph, a State must—*

7 “(i) *demonstrate that the assistance*
8 *will result in enhanced seismic safety in the*
9 *State;*

10 “(ii) *provide 50 percent of the costs of*
11 *the activities for which assistance is being*
12 *given, except that the Director may lower or*
13 *waive the cost-share requirement for these*
14 *activities in exceptional cases of economic*
15 *hardship; and*

16 “(iii) *meet such other requirements as*
17 *the Director of the Agency shall prescribe.*

18 “(4) *UNITED STATES GEOLOGICAL SURVEY.—The*
19 *United States Geological Survey (in this paragraph*
20 *referred to as the ‘Survey’) shall conduct research and*
21 *other activities necessary to characterize and identify*
22 *earthquake hazards, assess earthquake risks, monitor*
23 *seismic activity, and provide real-time earthquake in-*
24 *formation. In carrying out this paragraph, the Direc-*
25 *tor of the Survey shall—*

1 “(A) conduct a systematic assessment of the
2 seismic risks in each region of the Nation prone
3 to earthquakes, including, where appropriate, the
4 establishment and operation of intensive moni-
5 toring projects on hazardous faults, detailed seis-
6 mic hazard and risk studies in urban and other
7 developed areas where earthquake risk is deter-
8 mined to be significant, and engineering seis-
9 mology studies;

10 “(B) work with officials of State and local
11 governments to ensure that they are knowledge-
12 able about the specific seismic risks in their
13 areas;

14 “(C) develop standard procedures, in con-
15 sultation with the Director of the Federal Emer-
16 gency Management Agency, for issuing earth-
17 quake alerts, including aftershock advisories;

18 “(D) issue when justified, and notify the
19 Director of the Federal Emergency Management
20 Agency of, an earthquake prediction or other
21 earthquake advisory, which may be evaluated by
22 the National Earthquake Prediction Evaluation
23 Council;

24 “(E) operate, as integral parts of the Ad-
25 vanced National Seismic Research and Moni-

1 *toring System, a National Earthquake Informa-*
2 *tion Center and a national seismic network, to-*
3 *gether providing timely and accurate informa-*
4 *tion on earthquakes world-wide;*

5 *“(F) support the operation of regional seis-*
6 *mic networks in areas of higher seismic risk;*

7 *“(G) develop and support seismic instru-*
8 *mentation of buildings and other structures to*
9 *obtain data on their response to earthquakes for*
10 *use in engineering studies and assessment of*
11 *damage;*

12 *“(H) monitor and assess Earth surface de-*
13 *formation as it pertains to the evaluation of*
14 *earthquake hazards and impacts;*

15 *“(I) work with other Program agencies to*
16 *maintain awareness of, and where appropriate*
17 *cooperate with, earthquake risk reduction efforts*
18 *in other countries, to ensure that the Program*
19 *benefits from relevant information and advances*
20 *in those countries;*

21 *“(J) maintain suitable seismic hazard maps*
22 *in support of building codes for structures and*
23 *lifelines, including additional maps needed for*
24 *performance-based design approaches;*

1 “(K) conduct a competitive, peer-reviewed
2 process which awards grants and cooperative
3 agreements to complement and extend related in-
4 ternal Survey research and monitoring activi-
5 ties; and

6 “(L) operate, in cooperation with the Na-
7 tional Science Foundation, a Global Seis-
8 mographic Network for detection of earthquakes
9 around the world and research into fundamental
10 earth processes.

11 “(5) NATIONAL SCIENCE FOUNDATION.—The Na-
12 tional Science Foundation shall be responsible for
13 funding basic research that furthers the under-
14 standing of earthquakes, earthquake engineering, and
15 community preparation and response to earthquakes.
16 In carrying out this paragraph, the Director of the
17 National Science Foundation shall—

18 “(A) support multidisciplinary and inter-
19 disciplinary research that will improve the resil-
20 iency of communities to earthquakes, includ-
21 ing—

22 “(i) research that improves the safety
23 and performance of buildings, structures,
24 and lifelines, including the use of the large-
25 scale experimental and computational fa-

1 *cilities of the George E. Brown, Jr. Network*
2 *for Engineering Earthquake Simulation;*

3 “(ii) research to support more effective
4 earthquake mitigation and response meas-
5 ures, such as developing better knowledge of
6 the specific types of vulnerabilities faced by
7 segments of the community vulnerable to
8 earthquakes, addressing the barriers they
9 face in adopting mitigation and prepara-
10 tion measures, and developing methods to
11 better communicate the risks of earthquakes
12 and to promote mitigation; and

13 “(iii) research on the response of com-
14 munities, households, businesses, and emer-
15 gency responders to earthquakes;

16 “(B) support research to understand earth-
17 quake processes, earthquake patterns, and earth-
18 quake frequencies;

19 “(C) encourage prompt dissemination of
20 significant findings, sharing of data, samples,
21 physical collections, and other supporting mate-
22 rials, and development of intellectual property so
23 research results can be used by appropriate orga-
24 nizations to mitigate earthquake damage;

1 “(D) work with other Program agencies to
 2 maintain awareness of, and where appropriate
 3 cooperate with, earthquake risk reduction re-
 4 search efforts in other countries, to ensure that
 5 the Program benefits from relevant information
 6 and advances in those countries; and

7 “(E) include to the maximum extent prac-
 8 ticable diverse institutions, including Histori-
 9 cally Black Colleges and Universities, Hispanic-
 10 serving institutions, Tribal Colleges and Univer-
 11 sities, Alaska Native-serving institutions, and
 12 Native Hawaiian-serving institutions.”; and

13 (3) in subsection (c)(1) by inserting “on Natural
 14 Hazards Risk Reduction established under section 301
 15 of the Natural Hazards Risk Reduction Act of 2009”
 16 after “Interagency Coordinating Committee”.

17 **SEC. 105. POST-EARTHQUAKE INVESTIGATIONS PROGRAM.**

18 Section 11 of the Earthquake Hazards Reduction Act
 19 of 1977 (42 U.S.C. 7705e) is amended by striking “There
 20 is established” and all that follows through “conduct of such
 21 earthquake investigations.” and inserting “The Program
 22 shall include a post-earthquake investigations program, the
 23 purpose of which is to investigate major earthquakes so as
 24 to learn lessons which can be applied to reduce the loss of
 25 lives and property in future earthquakes. The lead Program

1 *agency, in consultation with each Program agency, shall*
 2 *organize investigations to study the implications of the*
 3 *earthquakes in the areas of responsibility of each Program*
 4 *agency. The investigations shall begin as rapidly as possible*
 5 *and may be conducted by grantees and contractors. The*
 6 *Program agencies shall ensure that the results of the inves-*
 7 *tigations are disseminated widely.”.*

8 **SEC. 106. AUTHORIZATION OF APPROPRIATIONS.**

9 *(a) IN GENERAL.—Section 12 of the Earthquake Haz-*
 10 *ards Reduction Act of 1977 (42 U.S.C. 7706) is amended—*

11 *(1) by adding at the end of subsection (a) the fol-*
 12 *lowing:*

13 *“(9) There are authorized to be appropriated to the*
 14 *Federal Emergency Management Agency for carrying out*
 15 *this Act—*

16 *“(A) \$10,238,000 for fiscal year 2010;*

17 *“(B) \$10,545,000 for fiscal year 2011;*

18 *“(C) \$10,861,000 for fiscal year 2012;*

19 *“(D) \$11,187,000 for fiscal year 2013; and*

20 *“(E) \$11,523,000 for fiscal year 2014.”;*

21 *(2) by adding at the end of subsection (b) the fol-*
 22 *lowing:*

23 *“(3) There are authorized to be appropriated to the*
 24 *United States Geological Survey for carrying out this Act,*

1 *including the Advanced National Seismic Research and*
2 *Monitoring System—*

3 “(A) \$70,000,000 for fiscal year 2010;

4 “(B) \$72,100,000 for fiscal year 2011;

5 “(C) \$74,263,000 for fiscal year 2012;

6 “(D) \$76,491,000 for fiscal year 2013; and

7 “(E) \$78,786,000 for fiscal year 2014.”;

8 (3) *by adding at the end of subsection (c) the fol-*
9 *lowing:*

10 “(3) *There are authorized to be appropriated to the*
11 *National Science Foundation for carrying out this Act—*

12 “(A) \$64,125,000 for fiscal year 2010;

13 “(B) \$66,049,000 for fiscal year 2011;

14 “(C) \$68,030,000 for fiscal year 2012;

15 “(D) \$70,071,000 for fiscal year 2013; and

16 “(E) \$72,173,000 for fiscal year 2014.”; and

17 (4) *by adding at the end of subsection (d) the fol-*
18 *lowing:*

19 “(3) *There are authorized to be appropriated to the*
20 *National Institute of Standards and Technology for car-*
21 *rying out this Act—*

22 “(A) \$7,000,000 for fiscal year 2010;

23 “(B) \$7,700,000 for fiscal year 2011;

24 “(C) \$7,931,000 for fiscal year 2012;

25 “(D) \$8,169,000 for fiscal year 2013; and

1 “(E) \$8,414,000 for fiscal year 2014.”.

2 (b) *CONFORMING AMENDMENT.*—Section 14 of the Na-
3 tional Earthquake Hazards Reduction Act of 1977 (42
4 U.S.C. 7708) is amended—

5 (1) by striking “(a) *ESTABLISHMENT.*—”; and

6 (2) by striking subsection (b).

7 ***TITLE II—WIND***

8 ***SEC. 201. SHORT TITLE.***

9 *This title may be cited as the “National Windstorm*
10 *Impact Reduction Act Reauthorization of 2009”.*

11 ***SEC. 202. PURPOSE.***

12 *Section 202 of the National Windstorm Impact Reduc-*
13 *tion Act of 2004 (42 U.S.C. 15701) is amended to read as*
14 *follows:*

15 ***“SEC. 202. PURPOSE.***

16 *“It is the purpose of the Congress in this title to*
17 *achieve a major measurable reduction in losses of life and*
18 *property from windstorms through the establishment and*
19 *maintenance of an effective Windstorm Impact Reduction*
20 *Program. The objectives of such Program shall include—*

21 *“(1) the education of households, businesses, and*
22 *communities about the risks posed by windstorms,*
23 *and the identification of locations, structures, life-*
24 *lines, and segments of the community which are espe-*
25 *cially vulnerable to windstorm damage and disrup-*

1 *tion, and the dissemination of information on meth-*
2 *ods to reduce those risks;*

3 *“(2) the development of technologically and eco-*
4 *nomically feasible design and construction methods*
5 *and procedures to make new and existing structures,*
6 *in areas of windstorm risk, windstorm resilient, giv-*
7 *ing high priority to the development of such methods*
8 *and procedures for lifelines, structures associated with*
9 *a potential high loss of life, and structures that are*
10 *especially needed in times of disasters, such as hos-*
11 *pitals and public safety and shelter facilities;*

12 *“(3) the implementation, in areas of major*
13 *windstorm risk, of instrumentation to record and*
14 *gather data on windstorms and the characteristics of*
15 *the wind during those events, and continued research*
16 *to increase the understanding of windstorm phe-*
17 *nomena;*

18 *“(4) the development, publication, and pro-*
19 *motion, in conjunction with State and local officials*
20 *and professional organizations, of model building*
21 *codes and standards and other means to encourage*
22 *consideration of information about windstorm risk in*
23 *making decisions about land use policy and construc-*
24 *tion activity; and*

1 “(5) the facilitation of the adoption of wind-
 2 storm risk mitigation measures in areas of windstorm
 3 risk by households, businesses, and communities
 4 through outreach, incentive programs, and other
 5 means.”.

6 **SEC. 203. DEFINITIONS.**

7 Section 203(1) of the National Windstorm Impact Re-
 8 duction Act of 2004 (42 U.S.C. 15702(1)) is amended by
 9 striking “Director of the Office of Science and Technology
 10 Policy” and inserting “Director of the National Institute
 11 of Standards and Technology”.

12 **SEC. 204. NATIONAL WINDSTORM IMPACT REDUCTION PRO-**
 13 **GRAM.**

14 Section 204 of the National Windstorm Impact Reduc-
 15 tion Act of 2004 (42 U.S.C. 15703) is amended to read as
 16 follows:

17 **“SEC. 204. NATIONAL WINDSTORM IMPACT REDUCTION**
 18 **PROGRAM.**

19 “(a) *ESTABLISHMENT.*—There is established the Na-
 20 tional Windstorm Impact Reduction Program.

21 “(b) *PROGRAM ACTIVITIES.*—The activities of the Pro-
 22 gram shall be designed to—

23 “(1) research and develop cost-effective, feasible
 24 methods, tools, and technologies to reduce the risks
 25 posed by windstorms to the built environment, espe-

1 *cially to lessen the risk to existing structures and life-*
2 *lines;*

3 *“(2) improve the understanding of windstorms*
4 *and their impacts on households, businesses, commu-*
5 *nities, buildings, structures, and lifelines, through*
6 *interdisciplinary and multidisciplinary research that*
7 *involves engineering, natural sciences, and social*
8 *sciences; and*

9 *“(3) facilitate the adoption of windstorm risk re-*
10 *duction measures by households, businesses, commu-*
11 *nities, local, State and Federal governments, national*
12 *standards and model building code organizations, ar-*
13 *chitects and engineers, building owners, and others*
14 *with a role in planning for disasters and planning,*
15 *constructing, retrofitting, and insuring buildings,*
16 *structures, and lifelines through—*

17 *“(A) grants, contracts, cooperative agree-*
18 *ments, and technical assistance;*

19 *“(B) development of hazard maps, stand-*
20 *ards, guidelines, voluntary consensus standards,*
21 *and other design guidance for windstorm risk re-*
22 *duction for buildings, structures, and lifelines;*

23 *“(C) outreach and information dissemina-*
24 *tion to communities on site specific windstorm*

1 *hazards and ways to reduce the risks from those*
2 *hazards; and*

3 *“(D) development and maintenance of a re-*
4 *pository of information, including technical*
5 *data, on windstorm hazards and risk reduction;*

6 *“(c) RESPONSIBILITIES OF PROGRAM AGENCIES.—*

7 *“(1) LEAD AGENCY.—The National Institute of*
8 *Standards and Technology (in this section referred to*
9 *as the ‘Institute’) shall be responsible for planning*
10 *and coordinating the Program. In carrying out this*
11 *paragraph, the Director of the Institute shall—*

12 *“(A) ensure that the Program includes the*
13 *necessary components to promote the implemen-*
14 *tation of windstorm risk reduction measures by*
15 *households, businesses, communities, local, State,*
16 *and Federal governments, national standards*
17 *and model building code organizations, archi-*
18 *tects and engineers, building owners, and others*
19 *with a role in planning and preparing for disas-*
20 *ters, and planning constructing, and retrofitting,*
21 *and insuring buildings, structures, and lifelines;*

22 *“(B) support the development of perform-*
23 *ance-based engineering tools, and work with the*
24 *appropriate groups to promote the commercial*
25 *application of such tools, through wind-related*

1 *building codes, standards, and construction prac-*
2 *tices;*

3 “(C) *ensure the use of social science research*
4 *and findings in informing the development of*
5 *technology and research priorities, in commu-*
6 *nicating windstorm risks to the public, in devel-*
7 *oping windstorm risk mitigation strategies, and*
8 *in preparing for windstorm disasters;*

9 “(D) *coordinate all Federal post-windstorm*
10 *investigations; and*

11 “(E) *when warranted by research or inves-*
12 *tigative findings, issue recommendations for*
13 *changes in model codes to the relevant code devel-*
14 *opment organizations, and report back to Con-*
15 *gress on whether such recommendations were*
16 *adopted.*

17 “(2) *NATIONAL INSTITUTE OF STANDARDS AND*
18 *TECHNOLOGY.—In addition to the lead agency re-*
19 *sponsibilities described under paragraph (1), the In-*
20 *stitute shall be responsible for carrying out research*
21 *and development to improve model codes, standards,*
22 *design guidance and practices for the construction*
23 *and retrofit of buildings, structures, and lifelines. In*
24 *carrying out this paragraph, the Director of the Insti-*
25 *tute shall—*

1 “(A) support the development of instrumen-
2 tation, data processing, and archival capabili-
3 ties, and standards for the instrumentation and
4 its deployment, to measure wind, wind loading,
5 and other properties of severe wind and structure
6 response;

7 “(B) coordinate with other appropriate
8 Federal agencies to make the data described in
9 subparagraph (A) available to researchers, stand-
10 ards and code developers, and local planners;

11 “(C) support the development of tools and
12 methods for the collection of data on the loss of
13 and damage to structures, and data on surviving
14 structures after severe windstorm events;

15 “(D) improve the knowledge of the impact
16 of severe wind on buildings, structures, lifelines,
17 and communities;

18 “(E) develop cost-effective windstorm im-
19 pact reduction tools, methods, and technologies;

20 “(F) work, in conjunction with other appro-
21 priate Federal agencies, to support the develop-
22 ment of wind standards and model codes; and

23 “(G) in conjunction with other appropriate
24 Federal agencies, work closely with standards
25 and model code development organizations, pro-

1 *professional societies, and practicing engineers, ar-*
2 *chitects, and others involved in the construction*
3 *of buildings, structures, and lifelines, to promote*
4 *better building practices, including by—*

5 *“(i) supporting the development of*
6 *technical resources for practitioners to im-*
7 *plement new knowledge; and*

8 *“(ii) supporting the development of*
9 *methods and tools to incorporate wind engi-*
10 *neering principles into design and construc-*
11 *tion practices.*

12 *“(3) FEDERAL EMERGENCY MANAGEMENT AGEN-*
13 *CY.—The Federal Emergency Management Agency*
14 *shall support the development of risk assessment tools*
15 *and effective mitigation techniques, assist with wind-*
16 *storm-related data collection and analysis, and sup-*
17 *port outreach, information dissemination, and imple-*
18 *mentation of windstorm preparedness and mitigation*
19 *measures by households, businesses, and communities,*
20 *including by—*

21 *“(A) working to develop or improve risk-as-*
22 *essment tools, methods, and models;*

23 *“(B) work closely with other appropriate*
24 *Federal agencies to develop and facilitate the*

1 *adoption of windstorm impact reduction meas-*
2 *ures, including by—*

3 “(i) *developing cost-effective retrofit*
4 *measures for existing buildings, structures,*
5 *and lifelines to improve windstorm per-*
6 *formance;*

7 “(ii) *developing methods, tools, and*
8 *technologies to improve the planning, de-*
9 *sign, and construction of new buildings,*
10 *structures, and lifelines;*

11 “(iii) *supporting the development of*
12 *model wind codes and standards for build-*
13 *ings, structures, and lifelines; and*

14 “(iv) *developing technical resources for*
15 *practitioners that reflect new knowledge and*
16 *standards of practice; and*

17 “(C) *develop and disseminate guidelines for*
18 *the construction of windstorm shelters.*

19 “(4) *NATIONAL OCEANIC AND ATMOSPHERIC AD-*
20 *MINISTRATION.—The National Oceanic and Atmos-*
21 *pheric Administration shall support atmospheric*
22 *sciences research and data collection to improve the*
23 *understanding of the behavior of windstorms and*
24 *their impact on buildings, structures, and lifelines,*
25 *including by—*

1 “(A) working with other appropriate Fed-
2 eral agencies to develop and deploy instrumenta-
3 tion to measure speed and other characteristics
4 of wind, and to collect, analyze, and make avail-
5 able such data;

6 “(B) working with officials of State and
7 local governments to ensure that they are knowl-
8 edgeable about, and prepared for, the specific
9 windstorm risks in their area;

10 “(C) supporting the development of suitable
11 wind speed maps and other derivative products
12 that support building codes and other hazard
13 mitigation approaches for buildings, structures,
14 and lifelines;

15 “(D) conducting a competitive, peer-re-
16 viewed process which awards grants and cooper-
17 ative agreements to complement the National
18 Oceanic and Atmospheric Administration’s
19 wind-related and storm surge-related research
20 and data collection activities;

21 “(E) working with other appropriate Fed-
22 eral agencies and State and local governments to
23 develop or improve risk-assessment tools, meth-
24 ods, and models; and

1 “(F) working with other appropriate Fed-
2 eral agencies to develop storm surge models to
3 better understand the interaction between wind-
4 storms and bodies of water.

5 “(5) NATIONAL SCIENCE FOUNDATION.—The Na-
6 tional Science Foundation shall be responsible for
7 funding basic research that furthers the under-
8 standing of windstorms, wind engineering, and com-
9 munity preparation and response to windstorms. In
10 carrying out this paragraph, the Director of the Na-
11 tional Science Foundation shall—

12 “(A) support multidisciplinary and inter-
13 disciplinary research that will improve the resil-
14 iency of communities to windstorms, including—

15 “(i) research that improves the safety
16 and performance of buildings, structures,
17 and lifelines;

18 “(ii) research to support more effective
19 windstorm mitigation and response meas-
20 ures, such as developing better knowledge of
21 the specific types of vulnerabilities faced by
22 segments of the community vulnerable to
23 windstorms, addressing the barriers they
24 face in adopting mitigation and prepara-
25 tion measures, and developing methods to

1 *better communicate the risks of windstorms*
2 *and to promote mitigation; and*

3 “(iii) *research on the response of com-*
4 *munities to windstorms, including on the*
5 *effectiveness of the emergency response, and*
6 *the recovery process of communities, house-*
7 *holds, and businesses;*

8 “(B) *support research to understand wind-*
9 *storm processes, windstorm patterns, and wind-*
10 *storm frequencies;*

11 “(C) *encourage prompt dissemination of*
12 *significant findings, sharing of data, samples,*
13 *physical collections, and other supporting mate-*
14 *rials, and development of intellectual property so*
15 *research results can be used by appropriate orga-*
16 *nizations to mitigate windstorm damage;*

17 “(D) *work with other Program agencies to*
18 *maintain awareness of, and where appropriate*
19 *cooperate with, windstorm risk reduction re-*
20 *search efforts in other countries, to ensure that*
21 *the Program benefits from relevant information*
22 *and advances in those countries; and*

23 “(E) *include to the maximum extent prac-*
24 *ticable diverse institutions, including Histori-*
25 *cally Black Colleges and Universities, Hispanic-*

1 *serving institutions, Tribal Colleges and Univer-*
 2 *sities, Alaska Native-serving institutions, and*
 3 *Native Hawaiian-serving institutions.”.*

4 **SEC. 205. AUTHORIZATION OF APPROPRIATIONS.**

5 *Section 207 of the National Windstorm Impact Reduc-*
 6 *tion Program of 2004 (42 U.S.C. 15706) is amended to read*
 7 *as follows:*

8 **“SEC. 207. AUTHORIZATION OF APPROPRIATIONS.**

9 **“(a) FEDERAL EMERGENCY MANAGEMENT AGENCY.—**
 10 *There are authorized to be appropriated to the Federal*
 11 *Emergency Management Agency for carrying out this*
 12 *title—*

13 **“(1) \$9,682,000 for fiscal year 2010;**

14 **“(2) \$9,972,500 for fiscal year 2011;**

15 **“(3) \$10,271,600 for fiscal year 2012;**

16 **“(4) \$10,579,800 for fiscal year 2013; and**

17 **“(5) \$10,897,200 for fiscal year 2014.**

18 **“(b) NATIONAL SCIENCE FOUNDATION.—***There are au-*
 19 *thorized to be appropriated to the National Science Foun-*
 20 *ation for carrying out this title—*

21 **“(1) \$9,682,000 for fiscal year 2010;**

22 **“(2) \$9,972,500 for fiscal year 2011;**

23 **“(3) \$10,271,600 for fiscal year 2012;**

24 **“(4) \$10,579,800 for fiscal year 2013; and**

25 **“(5) \$10,897,200 for fiscal year 2014.**

1 “(c) *NATIONAL INSTITUTE OF STANDARDS AND TECH-*
2 *NOLOGY.—There are authorized to be appropriated to the*
3 *National Institute of Standards and Technology for car-*
4 *rying out this title—*

5 “(1) \$4,120,000 for fiscal year 2010;

6 “(2) \$4,243,600 for fiscal year 2011;

7 “(3) \$4,370,900 for fiscal year 2012;

8 “(4) \$4,502,000 for fiscal year 2013; and

9 “(5) \$4,637,100 for fiscal year 2014.

10 “(d) *NATIONAL OCEANIC AND ATMOSPHERIC ADMINIS-*
11 *TRATION.—There are authorized to be appropriated to the*
12 *National Oceanic and Atmospheric Administration for car-*
13 *rying out this title—*

14 “(1) \$2,266,000 for fiscal year 2010;

15 “(2) \$2,334,000 for fiscal year 2011;

16 “(3) \$2,404,000 for fiscal year 2012;

17 “(4) \$2,476,100 for fiscal year 2013; and

18 “(5) \$2,550,400 for fiscal year 2014.”.

1 ***TITLE III—INTERAGENCY CO-***
 2 ***ORDINATING COMMITTEE ON***
 3 ***NATURAL HAZARDS RISK RE-***
 4 ***DUCTION***

5 ***SEC. 301. INTERAGENCY COORDINATING COMMITTEE ON***
 6 ***NATURAL HAZARDS RISK REDUCTION.***

7 *(a) IN GENERAL.—There is established an Interagency*
 8 *Coordinating Committee on Natural Hazards Risk Reduc-*
 9 *tion, chaired by the Director of the National Institute of*
 10 *Standards and Technology.*

11 *(1) MEMBERSHIP.—In addition to the chair, the*
 12 *Committee shall be composed of—*

13 *(A) the directors of—*

14 *(i) the Federal Emergency Manage-*
 15 *ment Agency;*

16 *(ii) the United State Geological Sur-*
 17 *vey;*

18 *(iii) the National Oceanic and Atmos-*
 19 *pheric Administration;*

20 *(iv) the National Science Foundation;*

21 *(v) the Office of Science and Tech-*
 22 *nology Policy; and*

23 *(vi) the Office of Management and*
 24 *Budget; and*

1 (B) the head of any other Federal agency
2 the Committee considers appropriate.

3 (2) *MEETINGS.*—The Committee shall not meet
4 less than 2 times a year at the call of the Director
5 of the National Institute of Standards and Tech-
6 nology.

7 (3) *GENERAL PURPOSE AND DUTIES.*—The Com-
8 mittee shall oversee the planning and coordination of
9 the National Earthquake Hazards Reduction Pro-
10 gram and the National Windstorm Impact Reduction
11 Program, and shall make proposals for planning and
12 coordination of any other Federal research for natural
13 hazard mitigation that the Committee considers ap-
14 propriate.

15 (4) *STRATEGIC PLANS.*—The Committee shall de-
16 velop and submit to Congress, not later than one year
17 after the date of enactment of this Act—

18 (A) a Strategic Plan for the National
19 Earthquake Hazards Reduction Program that
20 includes—

21 (i) prioritized goals for such Program
22 that will mitigate against the loss of life
23 and property from future earthquakes;

1 (ii) short-term, mid-term, and long-
2 term research objectives to achieve those
3 goals;

4 (iii) a description of the role of each
5 Program agency in achieving the
6 prioritized goals;

7 (iv) the methods by which progress to-
8 wards the goals will be assessed;

9 (v) an explanation of how the Program
10 will foster the transfer of research results
11 onto outcomes, such as improved building
12 codes;

13 (vi) a description of the role of social
14 science in informing the development of the
15 prioritized goals and research objectives;
16 and

17 (vii) a description of how the George
18 E. Brown, Jr. Network for Earthquake En-
19 gineering Simulation and the Advanced Na-
20 tional Seismic Research and Monitoring
21 System will be used in achieving the
22 prioritized goals and research objectives;
23 and

1 (B) a Strategic Plan for the National
2 Windstorm Impact Reduction Program that in-
3 cludes—

4 (i) prioritized goals for such Program
5 that will mitigate against the loss of life
6 and property from future windstorms;

7 (ii) short-term, mid-term, and long-
8 term research objectives to achieve those
9 goals;

10 (iii) a description of the role of each
11 Program agency in achieving the
12 prioritized goals;

13 (iv) the methods by which progress to-
14 wards the goals will be assessed;

15 (v) an explanation of how the Program
16 will foster the transfer of research results
17 onto outcomes, such as improved building
18 codes; and

19 (vi) a description of the role of social
20 science in informing the development of the
21 prioritized goals and research objectives.

22 (5) *PROGRESS REPORTS.*—Not later than one
23 year after the date of enactment of this Act, and at
24 least once every two years thereafter, the Committee
25 shall submit to the Congress—

1 (A) a report on the progress of the National
2 *Earthquake Hazards Reduction Program* that
3 includes—

4 (i) a description of the activities fund-
5 *ed for the previous two years of the Pro-*
6 *gram, a description of how these activities*
7 *align with the prioritized goals and re-*
8 *search objectives established in the Strategic*
9 *Plan, and the budgets, per agency, for these*
10 *activities;*

11 (ii) the outcomes achieved by the Pro-
12 *gram for each of the goals identified in the*
13 *Strategic Plan;*

14 (iii) a description of any recommenda-
15 *tions made to change existing building codes*
16 *that were the result of Program activities;*
17 and

18 (iv) a description of the extent to
19 *which the Program has incorporated rec-*
20 *ommendations from the Advisory Committee*
21 *on Earthquake Hazards Reduction; and*

22 (B) a report on the progress of the National
23 *Windstorm Impact Reduction Program* that in-
24 cludes—

1 (i) a description of the activities fund-
2 ed for the previous two years of the Pro-
3 gram, a description of how these activities
4 align with the prioritized goals and re-
5 search objectives established in the Strategic
6 Plan, and the budgets, per agency, for these
7 activities;

8 (ii) the outcomes achieved by the Pro-
9 gram for each of the goals identified in the
10 Strategic Plan;

11 (iii) a description of any recommenda-
12 tions made to change existing building codes
13 that were the result of Program activities;
14 and

15 (iv) a description of the extent to
16 which the Program has incorporated rec-
17 ommendations from the Advisory Committee
18 on Windstorm Impact Reduction.

19 (6) *COORDINATED BUDGET.*—The Committee
20 shall develop a coordinated budget for the National
21 Earthquake Hazards Reduction Program and a co-
22 ordinated budget for the National Windstorm Impact
23 Reduction Program. These budgets shall be submitted
24 to the Congress at the time of the President's budget
25 submission for each fiscal year.

1 (b) *ADVISORY COMMITTEES ON NATURAL HAZARDS*
2 *REDUCTION.*—

3 (1) *IN GENERAL.*—*The Director of the National*
4 *Institute of Standards and Technology shall establish*
5 *an Advisory Committee on Earthquake Hazards Re-*
6 *duction, an Advisory Committee on Windstorm Im-*
7 *pect Reduction, and other such advisory committees*
8 *as the Director considers necessary to advise the Insti-*
9 *tute on research, development, and technology transfer*
10 *activities to mitigate the impact of natural disasters.*

11 (2) *ADVISORY COMMITTEE ON EARTHQUAKE*
12 *HAZARDS REDUCTION.*—*The Advisory Committee on*
13 *Earthquake Hazards Reduction shall be composed of*
14 *at least 11 members, none of whom may be employees*
15 *of the Federal Government, including representatives*
16 *of research and academic institutions, industry stand-*
17 *ards development organizations, State and local gov-*
18 *ernment, and business communities who are qualified*
19 *to provide advice on earthquake hazards reduction*
20 *and represent all related scientific, architectural, and*
21 *engineering disciplines. The recommendations of the*
22 *Advisory Committee shall be considered by Federal*
23 *agencies in implementing the National Earthquake*
24 *Hazards Reduction Program.*

1 (3) *ADVISORY COMMITTEE ON WINDSTORM IM-*
 2 *PACT REDUCTION.*—*The Advisory Committee on*
 3 *Windstorm Impact Reduction shall be composed of at*
 4 *least 7 members, none of whom may be employees of*
 5 *the Federal Government, including representatives of*
 6 *research and academic institutions, industry stand-*
 7 *ards development organizations, State and local gov-*
 8 *ernment, and business communities who are qualified*
 9 *to provide advice on windstorm impact reduction and*
 10 *represent all related scientific, architectural, and en-*
 11 *gineering disciplines. The recommendations of the Ad-*
 12 *visory Committee shall be considered by Federal agen-*
 13 *cies in implementing the National Windstorm Impact*
 14 *Reduction Program.*

15 (4) *ASSESSMENTS.*—*The Advisory Committee on*
 16 *Earthquake Hazards Reduction and the Advisory*
 17 *Committee on Windstorm Impact Reduction shall*
 18 *offer assessments on—*

19 (A) *trends and developments in the natural,*
 20 *social, and engineering sciences and practices of*
 21 *earthquake hazards or windstorm impact mitiga-*
 22 *tion;*

23 (B) *the priorities of the Programs' Strategic*
 24 *Plans;*

25 (C) *the coordination of the Programs; and*

1 (D) and any revisions to the Programs
2 which may be necessary.

3 (5) *REPORTS.*—At least every two years, the Ad-
4 visory Committees shall report to the Director of the
5 National Institute of Standards and Technology on
6 the assessments carried out under paragraph (4) and
7 their recommendations for ways to improve the Pro-
8 grams. In developing recommendations for the Na-
9 tional Earthquake Hazards Reduction Program, the
10 Advisory Committee on Earthquake Hazards Reduc-
11 tion shall consider the recommendations of the United
12 States Geological Survey Scientific Earthquake Stud-
13 ies Advisory Committee.

14 (c) *COORDINATION OF FEDERAL DISASTER RE-*
15 *SEARCH, DEVELOPMENT, AND TECHNOLOGY TRANSFER.*—
16 Not later than 2 years after the date of enactment of this
17 Act, the Subcommittee on Disaster Reduction of the Com-
18 mittee on Environment and Natural Resources of the Na-
19 tional Science and Technology Council shall submit a re-
20 port to the Congress identifying—

21 (1) current Federal research, development, and
22 technology transfer activities that address hazard
23 mitigation for natural disasters, including earth-
24 quakes, hurricanes, tornados, wildfires, floods, and the
25 current budgets for these activities;

1 (2) *areas of research that are common to two or*
 2 *more of the hazards identified in paragraph (1); and*
 3 (3) *opportunities to create synergies between the*
 4 *research activities for the hazards identified in para-*
 5 *graph (1).*

6 ***TITLE IV—NATIONAL CONSTRU-***
 7 ***CTION SAFETY TEAM ACT***
 8 ***AMENDMENTS***

9 ***SEC. 401. NATIONAL CONSTRUCTION SAFETY TEAM ACT***
 10 ***AMENDMENTS.***

11 *The National Construction Safety Team Act (15*
 12 *U.S.C. 7301 et seq.) is amended—*

13 (1) *in section 2(a)—*

14 (A) *by striking “a building or buildings”*
 15 *and inserting “a building, buildings, or infra-*
 16 *structure”;* and

17 (B) *by striking “To the maximum extent*
 18 *practicable, the Director shall establish and de-*
 19 *ploy a Team within 48 hours after such an*
 20 *event.” and inserting “The Director shall make*
 21 *a decision whether to deploy a Team within 72*
 22 *hours after such an event.”;*

23 (2) *in section 2(b)(1), by striking “buildings”*
 24 *and inserting “buildings or infrastructure”;*

1 (3) in section 2(b)(2)(A), by striking “building”
2 and inserting “building or infrastructure”;

3 (4) in section 2(b)(2)(D), by striking “buildings”
4 and inserting “buildings or infrastructure”;

5 (5) in section 2(c)(1), by striking “the United
6 States Fire Administration and”;

7 (6) in section 2(c)(1)(G), by striking “building”
8 and inserting “building or infrastructure”;

9 (7) in section 2(c)(1)(J)—

10 (A) by striking “building” and inserting
11 “building or infrastructure”; and

12 (B) by inserting “and the National Wind-
13 storm Impact Reduction Act of 2004” after “Act
14 of 1977”;

15 (8) in section 4(a), by striking “investigating a
16 building” and inserting “investigating building and
17 infrastructure”;

18 (9) in section 4(a)(1)—

19 (A) by striking “a building” and inserting
20 “a building or infrastructure”; and

21 (B) by striking “building” both of the other
22 places it appears and inserting “building or in-
23 frastructure”;

1 (10) in section 4(a)(3), by striking “building”
2 both places it appears and inserting “building or in-
3 frastructure”;

4 (11) in section 4(b), by striking “building” both
5 places it appears and inserting “building or infra-
6 structure”;

7 (12) in section 4(c)(1) and (2), by striking
8 “building” both places it appears and inserting
9 “building or infrastructure”;

10 (13) in section 4(d)(3) and (4), by striking
11 “building” both places it appears and inserting
12 “building or infrastructure”;

13 (14) in section 7(a), by striking “on request and
14 at reasonable cost”;

15 (15) in section 7(c), by striking “building” and
16 inserting “building or infrastructure”;

17 (16) in section 8(1) and (4), by striking “build-
18 ing” both places it appears and inserting “building
19 or infrastructure”;

20 (17) in section 9, by striking “the United States
21 Fire Administration and”;

22 (18) in section 9(2)(C), by striking “building”
23 and inserting “building or infrastructure”;

24 (19) in section 10(3), by striking “building” and
25 inserting “building and infrastructure”;

1 (20) in section 11(a), by striking “the United
2 *States Fire Administration and*”; and

3 (21) by striking section 12.

4 ***TITLE V—FIRE RESEARCH***
5 ***PROGRAM***

6 ***SEC. 501. FIRE RESEARCH PROGRAM.***

7 Section 16(a)(1) of the National Institute of Standards
8 *and Technology Act (15 U.S.C. 278f(a)(1)) is amended—*
9 (1) in subparagraph (D), by inserting “fires at
10 *the wildland-urban interface,*” after “but not limited
11 *to,”; and*

12 (2) in subparagraph (E), by inserting “fires at
13 *the wildland-urban interface,*” after “types of fires,
14 *including*”.

Union Calendar No. 244

11TH CONGRESS
2^D Session

H. R. 3820

[Report No. 111-424, Part I]

A BILL

To reauthorize Federal natural hazards reduction programs, and for other purposes.

FEBRUARY 26, 2010

Reported from the Committee on Science and Technology
with an amendment

FEBRUARY 26, 2010

Committees on Natural Resources and Transportation
and Infrastructure discharged; committed to the Committee of the Whole House on the State of the Union
and ordered to be printed